

Environmental Protection Agency

§ 600.310–12

Below this number, include the expression: “gallons per 100 miles”.

(4) Insert a horizontal range bar below the boxes specified in paragraphs (b)(2) and

(3) of this section that shows how far the vehicle can drive before the battery is fully discharged, and also how far the vehicle can drive before running out of fuel, as described in § 600.311. Scale the range bar such that the driving range at the point of fully discharging the battery is directly between the two boxes. Identify the driving range up to fully discharging the battery underneath that point on the range bar (e.g., “50 miles”). Use solid black for the gasoline-only portion of the range bar. Include the left-justified expression “Gasoline only” in the gasoline-only portion of the range bar. Similarly, in the electric portion of the range bar, include the left-justified expression “All electric range” if the vehicle’s engine starts only after the battery is fully discharged, or “Electricity + Gasoline” if the vehicle uses combined power from the battery and the engine before the battery is fully discharged. Include a vehicle logo at the right end of the range bar. Extend an arrow from the battery portion of the range bar up to the right side of the box described in paragraph (b)(2) of this section. Similarly, extend an arrow from the gasoline-only portion of the range bar up to the left side of the box described in paragraph (b)(3) of this section. Include numbers below the bar showing the scale, with at least three evenly spaced increments to cover operation before the battery is fully discharged. Include one more increment using that same scale into the gasoline-only portion of the range bar. Indicate a broken line toward the right end of the range bar, followed by the vehicle’s total driving distance before running out of fuel, as described in § 600.311. Adjust the scale and length of the range bar if the specifications in this paragraph (a)(5) do not work for your vehicle. Include a left-justified heading above the range bar with the expression: “Driving Range”. For vehicles that use combined power from the battery and the engine before the battery is fully discharged, add the following statement below the range bar

described in this paragraph (b)(4): “All electric range = x miles”; complete the expression by identifying the appropriate value for driving range starting from a full battery before the engine starts as described in § 600.311.

(c) Include the following statement instead of the one identified in § 600.302–12(c)(5): “This vehicle emits x grams CO₂ per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel and electricity also create emissions; learn more at fueleconomy.gov.” For x, insert the vehicle’s composite CO₂ emission rate as described in § 600.311.

[76 FR 39562, July 6, 2011]

§ 600.310–12 Fuel economy label format requirements—electric vehicles.

Fuel economy labels for electric vehicles must meet the specifications described in § 600.302, with the following modifications:

(a) Include the following statement instead of the statement specified in § 600.302–12(b)(4): “Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets a MPG and costs \$ b to fuel over 5 years. Cost estimates are based on c miles per year at \$ d per kW-hr. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.” For a, b, c, and d, insert the appropriate values established by EPA.

(b) Include the following elements instead of the information identified in § 600.302–12(c)(1):

(1) The heading “Fuel Economy” near the top left corner of the field.

(2) The combined fuel economy value as determined in § 600.311 below the heading. Include the expression “combined city/hwy” below this number.

(3) An electric plug logo to the left of the combined fuel economy value.

(4) The units identifier and specific fuel economy values to the right of the combined fuel economy value as follows:

(i) Include the term “MPGe” in the upper portion of the designated space.

(ii) Include the city fuel economy value determined in § 600.311 in the lower left portion of the designated

space. Include the expression “city” below this number.

(iii) Include the highway fuel economy value determined in § 600.311 in the lower right portion of the designated space. Include the expression “highway” below this number.

(5) The fuel consumption rate determined in § 600.311, to the right of the fuel economy information. Include the expression “kW-hrs per 100 miles” below the numerical value.

(6) The sub-heading “Driving Range” below the combined fuel economy value. Below this sub-heading, insert a horizontal range bar nominally 80 mm long to show how far the vehicle can drive when fully fueled. Include a vehicle logo at the right end of the range bar. Include the following left-justified expression inside the range bar: “When fully charged, vehicle can travel about * * *”. Below the right end of the range bar, include the expression “x miles”; complete the expression by identifying the appropriate value for total driving range from § 600.311. Include numbers below the bar showing the scale, with numbers starting at 0 and increasing in equal increments. Use good engineering judgment to divide the range bar into four, five, or six increments.

(7) Below the driving range information, the expression “Charge Time: x hours (240V)”, where x is the time to charge the battery as specified in § 600.311. Change the specified voltage if appropriate as specified in § 600.311.

(c) Include the following statement instead of the one identified in § 600.302-12(c)(5): “This vehicle emits x grams CO₂ per mile. The best emits 0 grams per mile (tailpipe only). Does not include emissions from generating electricity; learn more at fueleconomy.gov.” For x, insert the vehicle’s composite CO₂ emission rate as described in § 600.311.

[76 FR 39563, July 6, 2011, as amended at 77 FR 63184, Oct. 15, 2012]

§ 600.311-12 Determination of values for fuel economy labels.

(a) *Fuel economy.* Determine city and highway fuel economy values as described in § 600.210-12(a) and (b). Determine combined fuel economy values as described in § 600.210-12(c). Note that the label for plug-in hybrid electric ve-

hicles requires separate values for combined fuel economy for vehicle operation before and after the vehicle’s battery is fully discharged; we generally refer to these modes as “Blended Electric+Gas” (or “Electric Only”, as applicable) and “Gas only”.

(b) CO₂ emission rate. Determine the engine-related CO₂ emission rate as described in § 600.210-12(d).

(c) *Fuel consumption rate.* Calculate the fuel consumption rate as follows:

(1) For vehicles with engines that are not plug-in hybrid electric vehicles, calculate the fuel consumption rate in gallons per 100 miles (or gasoline gallon equivalent per 100 miles for fuels other than gasoline or diesel fuel) with the following formula, rounded to the first decimal place:

Fuel Consumption Rate = 100/MPG

Where:

MPG = The value for combined fuel economy from § 600.210-12(c), rounded to the nearest whole mpg.

(2) For plug-in hybrid electric vehicles, calculate two separate fuel consumption rates as follows:

(i) Calculate the fuel consumption rate based on engine operation after the battery is fully discharged as described in paragraph (c)(1) of this section.

(ii) Calculate the fuel consumption rate during operation before the battery is fully discharged in kW-hours per 100 miles as described in SAE J1711 (incorporated by reference in § 600.011), as described in § 600.116.

(3) For electric vehicles, calculate the fuel consumption rate in kW-hours per 100 miles with the following formula, rounded to the nearest whole number:

Fuel Consumption Rate = 100/MPG

Where:

MPG = The combined fuel economy value from paragraph (a) of this section, in miles per kW-hour.

(4) For hydrogen fuel cell vehicles, calculate the fuel consumption rate in kilograms of hydrogen per 100 miles with the following formula, rounded to the nearest whole number:

Fuel Consumption Rate = 100/MPG

Where: